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10/779,295	02/13/2004	Joshua T. Goodman	MS306896.1	7423

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EXAMINER
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TRAN, PHILIP B

ART UNIT	PAPER NUMBER
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2155

NOTIFICATION DATE	DELIVERY MODE
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06/30/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/779,295	<b>Applicant(s)</b> GOODMAN ET AL.	
	<b>Examiner</b> Philip B. Tran	<b>Art Unit</b> 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/7/08</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Notice to Applicant(s)***

1. This is in response to a Request for Continued Examination (RCE) filed on 4/25/2008. Claims 1, 30 and 39 have been amended. Therefore, claims 1-42 are pending for further examination.

### ***Claim Objections***

2. Claims 19-21 are objected to because of the following informalities:

Claims 19-21 seem to be independent claims and thus should be rewritten in independent form for clarity.

Appropriate corrections are required.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-29 and 39-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

It appears that claims 1, 39 and 42 would reasonably be interpreted by one of ordinary skill as a system of software per se, failing to fall within a statutory category of invention. A computer implemented system as amended does not mean a hardware system. As such, a software program code alone is not a machine, and it is clearly not a process, manufacture nor composition of matter. Also, claims 2-29 and 40-41 do not

resolve the deficiencies of their parent claims. Thus, claims 1-29 and 39-42 are not limited to statutory subject matter and are therefore nonstatutory.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-5, 8-12 and 16-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Bandini et al (Hereafter, Bandini), U.S. Pat. No. 7,117,358.

Regarding claim 1, Bandini teaches a computer implemented system that facilitates classifying messages in connection with spam prevention (= filtering e-mail messages to identify SPAM messages) [see Abstract and Col. 1, Lines 30-41], comprising:

a component that receives a set of the messages (= intercepting messages) [see Figs. 2-3];

a first classification component that identifies a subset of the messages as SPAM or flagged for further analysis, and temporarily delays further classification of the subset of messages (= filtering messages by comparing messages to data in SPAM database and performing quarantine/initiate further review which is inherent indicating of a

temporary delay period) [see Fig. 2 and Col. 3, Line 52 to Col. 4, Line 35 and Col. 7, Lines 34-58]; and

a second classification component that after a determined delay period (= further review which is inherent indicating of a temporary delay period) classifies the subset of messages (= blocking and adding SPAM message to database or forwarding clean message to e-mail server, and examining borderline message further with additional evaluation for determining whether the message is a SPAM message) [see Fig. 2 and Col. 3, Line 52 to Col. 4, Line 35] based at least in part on one or more learning techniques that are employed to receive additional data associated with the subset of messages during the determined delay period, the additional data includes data based on an analysis of the subset of messages (= prompting the users for further information (i.e., learning technique) about the message before adding the message data to the SPAM database) [see Col. 7, Lines 34-58].

Regarding claims 2-3, Bandini further teaches the system of claim 1, the second classification component identifying some of the subset of messages as good based on a lack of sufficient new negative information and identifying some of the subset of messages as good based on new positive information other than a close match to a good message [see Figs. 2-3 and Col. 4, Line 5 to Col. 6, Line 27].

Regarding claim 4, Bandini further teaches the system of claim 1, the messages are classified as spam or flagged or delayed based on a lack of information [see Abstract and Figs. 2-3].

Regarding claim 5, Bandini further teaches the system of claim 1, the messages are reclassified based on updated information from a machine learning spam filter [see Fig. 4].

Regarding claim 8, Bandini further teaches the system of claim 2, the lack of sufficient new negative information comprises information from polling users about at least a subset of messages [see Col. 4, Lines 11-67].

Regarding claim 9, Bandini further teaches the system of claim 2, the lack of sufficient new negative information comprises a low volume of similar messages [see Col. 7, Line 34 to Col. 8, Line 19].

Regarding claims 10-11, Bandini further teaches the system of claim 8, the messages are classified as similar based on the sender's identity and the sender's identity is classified based on his IP address [see Col. 5, Line 41 to Col. 6, Line 12].

Regarding claim 12, Bandini further teaches the system of claim 8, the similarity of messages is based on the URLs contained in the messages [see Col. 5, Lines 20-51].

Regarding claim 16, Bandini further teaches the system of claim 1, further comprising a feedback component that receives information relating to the first and/or second classification component(s)', and employs the information in connection with training a spam filter or populating a spam list [see Figs. 3-4].

Regarding claim 17, Bandini further teaches the system of claim 1, wherein the messages comprise at least one of: electronic mail (e-mail) and messages [see Abstract and Col. 3, Lines 29-50].

Regarding claim 18, Bandini further teaches the system of claim 1, wherein the component that receives a set of the messages is any one of an e-mail server, a message server, and client e-mail software [see Col. 3, Lines 29-50].

Claims 19-21 are rejected under the same rationale set forth above to claim 1.

Regarding claim 22, Bandini further teaches the system of claim 1, further comprising a quarantine component that quarantines the subset of messages based at least in part upon identification as flagged for further analysis by the first classification component [see Figs. 2-4].

Regarding claims 23-24, Bandini further teaches the system of claim 1, the quarantining effected via placing the subset of messages in a folder separate from other messages and the folder is visible or invisible to a user [see Fig. 2].

Regarding claim 25, Bandini further teaches the system of claim 1, further comprising an identification component that identifies a source associated with a high occurrence of the subset of messages [see Col. 7, Line 10 to Col. 8, Line 36].

Regarding claim 26, Bandini further teaches the system of claim 1, further comprising a time-stamp component that stamps at least one of an original arrival date on the message and a release date when classification of the message resumes [see Col. 5, Lines 1-19].

Regarding claim 27, Bandini further teaches the system of claim 1, the subset of messages excludes at least one of messages from senders on safelists, messages



readily identified and classified as spam, messages readily identified and classified as good [see Abstract and Figs. 2-4].

Regarding claims 28-29, Bandini further teaches the system of 1, the first classification component determines length of delay before classification of the subset of messages is performed and the length of delay is based at least in part upon at least one of the following: amount of time until a next scheduled filter update; amount of time until download of new or updated filter; and spam probability score assigned to respective messages in the subset (= performing quarantine/initiate further review which is inherent indicating of a temporary delay period) [see Fig. 2 and Col. 3, Line 52 to Col. 4, Line 35 and Col. 7, Lines 34-58].

Regarding claim 30, Bandini teaches a method for classifying messages, comprising:

receiving a set of messages to classify, based on lack of sufficient information, temporarily delaying classification on at least a subset of the messages as either spam or good or initially classifying the subset of messages as untrustworthy or suspicious, determining a delay time period based at least in part upon at least one of a probability that the message is spam, a time of next filter update, a time of next filter download or a level of uncertainty associated with the subset of the messages (= filtering messages by comparing messages to data in SPAM database and performing quarantine/initiate

further review which is inherent indicating of a temporary delay period) [see Abstract and Figs. 2-4 and Col. 3, Line 52 to Col. 4, Line 35 and Col. 7, Lines 34-58]; and

classifying the untrustworthy or suspicious subset of messages as spam or good after the determined delay period based at least in part on one or more learning techniques that are employed during the determined delay period to receive additional data associated with the subset of messages (= blocking and adding SPAM message to database or forwarding clean message to e-mail server, and examining borderline message further with additional evaluation for determining whether the message is a SPAM message) [see Figs. 2-4 and Col. 3, Line 52 to Col. 4, Line 35], the one or more learning techniques include at least one of monitoring the subset of the messages with respect to at least one of volume per sender or similarities among quarantined messages, or analyzing the subset of the messages for at least one of their content or origination information (= prompting the users for further information (i.e., learning technique) about the message before adding the message data to the SPAM database) [see Col. 7, Lines 34-58].

Regarding claim 31, Bandini further teaches the method of claim 30, further comprising a machine learning filter trained to determine the likelihood of quarantining aiding a correct eventual classification [see Figs. 2-4].

Regarding claim 32, Bandini further teaches the method of claim 30, further comprising resuming classification when at least one of the following occurs: a quarantine period elapses; and additional information about the subset of messages has been obtained to facilitate classification of the respective messages in the subset as either spam or good [see Abstract and Figs. 2-4].

Regarding claim 33, Bandini further teaches the method of claim 30, the subset of messages excluding messages that is readily classified as spam or good or is from senders on a safelist [see Abstract and Figs. 2-4].

Regarding claim 34, Bandini further teaches the method of claim 30, temporarily delaying classification of the message when based at least in part upon at least one of the following: sender's IP address on the message has not been seen before; sender's domain has not been seen before; sender's domain lacks a reverse IP address; a forward lookup on the sender's domain does not at least approximately match the sender's IP address; the message comprises at least one of an embedded domain name, an embedded macro, and an executable file; the message comprises conflicting evidence of good and spam messages; the message originates from a location associated with spam; the message is written in a language associated with spam; the message comprises primarily an image; and the message comprises HTML [see Col. 5, Line 41 to Col. 6, Line 12].

Regarding claims 35-38, Bandini further teaches the method of claim 30, further comprising delivering at least a subset of suspicious messages and the subset of suspicious messages is delivered to their respective intended recipients and their actions facilitate determining whether the subset of messages is spam or good and the subset of messages for which feedback is sought is a fixed percentage of messages or a fixed quantity of messages per sender that are temporarily delayed from classification and the subset of messages for which feedback is sought is allowed to get through without classification as either spam or good to facilitate learning more about the messages [see Figs. 2-4 and Col. 7, Line 59 to Col. 8, Line 19].

Regarding claim 39, Bandini teaches a computer executable API that facilitates classifying messages by quarantining comprising: calculating a spam probability score for incoming messages, quarantining at least a subset of messages based at least in part upon their respective spam probability scores, and recommending a quarantine time, the quarantined subset of messages classified as good or spam after the quarantine time based at least in part on one or more learning techniques that are employed during the quarantine time to receive additional data associated with the subset of messages [see Figs. 2-4 and Col. 3, Line 51 to Col. 4, Line 67 and Col. 7, Line 10 to Col. 8, Line 36].

Regarding claim 40, Bandini further teaches the API of claim 39, further comprising quarantining at least a subset of messages until the next filter download, at which time the filter determines whether to continue quarantining or resume classification of the messages; and repeating until a final classification of either spam or good is made [see Col. 3, Line 51 to Col. 4, Line 67 and Col. 7, Line 10 to Col. 8, Line 36].

Regarding claim 41, Bandini further teaches the API of claim 39, further comprising communicating between server and client that server filter(s) has quarantined the respective message for a time period; and reducing a client filter quarantine time [see Figs. 2-4].

Claim 42 is rejected under the same rationale set forth above to claim 30.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6-7 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bandini et al (Hereafter, Bandini), U.S. Pat. No. 7,117,358 in view of Lin, U.S. Pat. No. 7,051,077.

Regarding claims 6-7, Bandini does not explicitly teach the system of claim 2, wherein the lack of sufficient new negative information comprises the lack of appearance of similar messages in honeypots and wherein the lack of sufficient new negative information comprises a lack of user complaints on similar information. However, it would have been obvious to one of skilled in the art to use honeypots that classify spam by using dummy e-mail addresses or fake recipients to attract spam and based on the user complaints on similar information to determine the probability that a new e-mail message is either spam or non-spam message.

Regarding claims 13-15, Bandini further teaches blocking the spam message [see Figs. 2-4]. Bandini does not explicitly teach the system of claim 1, messages initially classified as spam are deleted based on new information and the spam is permanently deleted and the spam is moved to a deleted messages folder. However, it would have been obvious to one of skilled in the art to remove the messages classified as spam messages by placing them in a deleted folder.

### ***Response to Arguments***

9. Applicant's arguments have been fully considered but they are not persuasive because of the following reasons:

The examiner respectfully submits that claims 1-29 and 39-42 are still rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. It appears that claims 1, 39 and 42 would reasonably be interpreted by one of ordinary skill as a system of software per se, failing to fall within a statutory category of invention. A computer implemented system as amended does not mean a hardware system. As such, a software program code alone is not a machine, and it is clearly not a process, manufacture nor composition of matter. Also, claims 2-29 and 40-41 do not resolve the deficiencies of their parent claims. Thus, claims 1-29 and 39-42 are not limited to statutory subject matter and are therefore nonstatutory.

The examiner respectfully submits that based on the broadest reasonable interpretation, Bandini still teaches a computer implemented system that facilitates classifying messages in connection with spam prevention such as filtering e-mail messages to identify SPAM messages [see Bandini, Abstract and Col. 1, Lines 30-41], comprising a component that receives a set of the messages. That is, Bandini discloses intercepting messages [see Bandini, Figs. 2-3]. In addition, Bandini further teaches a first classification component that identifies a subset of the messages as SPAM or flagged for further analysis, and temporarily delays further classification of the subset of messages. For example, Bandini discloses filtering messages by comparing messages to data in SPAM database and performing quarantine/initiate further review which is inherent indicating of a temporary delay period [see Bandini, Fig. 2 and Col. 3, Line 52 to Col. 4, Line 35 and Col. 7, Lines 34-58].

Moreover, Bandini further teaches a second classification component that after a determined delay period classifies the subset of messages. For example, Bandini discloses blocking and adding SPAM message to database or forwarding clean message to e-mail server, and examining borderline message further with additional evaluation for determining whether the message is a SPAM message [see Bandini, Fig. 2 and Col. 3, Line 52 to Col. 4, Line 35]. Also, Bandini further teaches classifying the subset of messages based at least in part on one or more learning techniques that are employed to receive additional data associated with the subset of messages during the determined delay period. For example, Bandini discloses prompting the users for further information (i.e., learning technique) about the message before adding the message data to the SPAM database [see Bandini, Col. 7, Lines 34-58].

Therefore, the examiner asserts that the cited prior arts teach or suggest the subject matter recited in independent claims. Dependent claims are rejected at least by virtue of their dependency on independent claims and by other reasons set forth above. Accordingly, claims 1-42 are respectfully rejected as shown above.

10. A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION. FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED (35 U.S.C. § 133). EXTENSIONS OF TIME MAY BE OBTAINED UNDER THE PROVISIONS OF 37 CAR 1.136(A).



11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tran whose telephone number is (571) 272-3991. The Group fax phone number is (571) 273-8300. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar, can be reached on (571) 272-4006.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Philip B Tran/  
Primary Examiner, Art Unit 2155  
June 21, 2008